

**IN THE CLAIMS:**

Please amend claims 29, 30, 36, 37, 44, 45, 53, 55 and 56, as follows:

1 - 28. (Canceled).

29. (Currently Amended) A coaxial line plug-in connection for connecting a first end of a first coaxial line and a second end of a second coaxial line, wherein each of the first and second coaxial lines has an inner conductor and an outer conductor and wherein the outer conductors surround the inner conductors, the coaxial line plug-in connection comprising:

a socket having an end face;

a plug; and

a separating element; and

a  $\lambda/4$ -coupling zone;

wherein the separating element is of a dielectric material for galvanically separating at least the outer conductors of the first and second coaxial lines;

wherein the separating element further covers the end face of the socket; and

wherein the socket and the plug couple the first end and the second ends on the  $\lambda/4$ -coupling zone for transmitting microwave signals of a wavelength  $\lambda$  between the first and second coaxial lines.

30. (Currently Amended) The coaxial line plug-in connection according to claim 29, ~~further comprising:~~

~~a coupling zone~~;

wherein the plug has a radially exterior lateral wall face;

wherein the socket has a radially interior lateral wall face; and

wherein, when the first end and the second end are inserted in the coaxial line plug-in connection, the radially exterior lateral wall face and radially interior lateral wall face lie opposite in the coupling zone and are spaced apart by the separating element.

31. (Original) The coaxial line plug-in connection according to claim 29, wherein the separating element is arranged in the socket.
32. (Original) The coaxial line plug-in connection according to claim 29, wherein the separating element consists of at least one material selected from the group consisting of PTFE, ceramics and glass.
33. (Original) The coaxial line plug-in connection according to claim 30, wherein the separating element is arranged ring-shaped in the coupling zone between the exterior lateral wall face of the plug and the interior lateral wall face of the socket.
34. (Original) The coaxial line plug-in connection according to claim 33, wherein the ring-shaped separating element has a minimum wall thickness of 0.5 mm.
35. (Original) The coaxial line plug-in connection according to claim 30,  
wherein the coupling zone has an axial direction;  
wherein the coupling zone receives the separating element; and  
wherein the coupling zone has a length of  $\lambda/4$  in the axial direction.
36. (Currently Amended) A coaxial line plug-in connection for coupling a first end of a first coaxial line and a second end of a second coaxial line, wherein each of the first and second coaxial lines has an inner conductor and an outer conductor and wherein the outer conductors of the first and second coaxial lines surround the inner conductors of the first and second coaxial lines, the coaxial line plug-in connection comprising:  
a socket having an end face;  
a plug; and  
a separating element; and  
a  $\lambda/4$ -coupling zone;  
wherein the plug is comprised of one of the first and second ends;

wherein the separating element is of a dielectric material for galvanically separating at least the outer conductors of the first and second coaxial lines;

wherein the separating element further covers the end face of the socket; and

wherein the socket and the plug couple the first end and the second ends on the  $\lambda/4$ -coupling zone for transmitting microwave signals of a wavelength  $\lambda$  between the first and second coaxial lines.

37. (Currently Amended) The coaxial line plug-in connection according to claim 36, ~~further comprising~~

~~a coupling zone;~~

wherein the plug has a radially exterior lateral wall face comprised of the outer conductor, beyond which protrudes the inner conductor in a pin-shape;

wherein the socket has a radially interior lateral wall face; and

wherein, in an inserted state, the radially exterior lateral wall face and radially interior lateral wall face lie opposite each other in the coupling zone spaced apart by the separating element.

38. (Original) The coaxial line plug-in connection according to claim 36, wherein the separating element is arranged in the socket.

39. (Original) The coaxial line plug-in connection according to claim 36, wherein the separating element consists of at least one material selected from the group consisting of PTFE, ceramics and glass.

40. (Original) The coaxial line plug-in connection according to claim 36, further comprising:

a fastening flange which is attached to the plug;

wherein an inserted state of the socket and the plug is ensured by means of the fastening flanged attached to the plug.

41. (Original) The coaxial line plug-in connection according to claim 37,  
wherein a further dielectric material is arranged ring-shaped in the coupling zone  
between the exterior lateral wall face of the plug and the interior lateral wall face of the socket.
42. (Original) The coaxial line plug-in connection according to claim 41,  
wherein the further ring-shaped dielectric material has a minimum wall thickness of 0.5  
mm.
43. (Original) The coaxial line plug-in connection according to claim 37,  
wherein the coupling zone has an axial direction and receives the separating element; and  
wherein the coupling zone has an optimum length of  $\lambda/4$  in the axial direction.
44. (Currently Amended) A coaxial line plug-in connection for coupling a first end of a first  
coaxial line and a second end of a second coaxial line, wherein each of the first and second  
coaxial lines has an inner conductor and an outer conductor and wherein the outer conductors of  
the first and second coaxial lines surround the inner conductors of the first and second coaxial  
lines, the coaxial line plug-in connection comprising:  
a socket having an end face;  
a plug having an end face; and  
at least one separating element; and  
at least one  $\lambda/4$ -coupling zone;  
wherein the plug is comprised of one of the first and second ends;  
wherein the at least one separating element is of a dielectric material for  
galvanically separating the inner conductors and the outer conductors of the first and second  
coaxial lines;  
wherein the at least one separating element further covers the end faces of both  
the socket and the plug; and  
wherein the socket and the plug couple the first end and the second ends on the at  
least one  $\lambda/4$ -coupling zone for transmitting microwave signals of a wavelength  $\lambda$  between the

first and second coaxial lines.

45. (Currently Amended) The coaxial line plug-in connection according to claim 44, further comprising:

~~a first and a second coupling zone;~~

wherein the at least one separating element comprises a first separating element and a second separating element;

wherein the plug has a radially exterior lateral wall face comprised of a first outer conductor of the outer conductors of the first and second coaxial lines;

wherein a first inner conductor of the inner conductors of the first and second coaxial lines protrudes beyond the first outer conductor in a pin-shape;

wherein the socket has a first radially interior lateral wall face and a second radially interior lateral wall face;

wherein the radially exterior lateral wall face of the plug and the first radially interior lateral wall face of the socket, in an inserted state, lie opposite each other spaced apart by the first separating element in ~~the~~ a first  $\lambda/4$ -coupling coupling zone, whereto follows ~~the~~ a second ~~coupling~~  $\lambda/4$ -coupling zone in which the first inner conductor lies opposite the second interior lateral wall face of the socket spaced apart by the second separating element.

46. (Original) The coaxial line plug-in connection according to claim 44, wherein the at least one separating element is arranged in the socket.

47. (Original) The coaxial line plug-in connection according to claim 44, wherein the at least one separating element consists of at least one material selected from the group consisting of PTFE, ceramics and glass.

48. (Original) The coaxial line plug-in connection according to claim 44, further comprising

a fastening flange;

wherein the fastening flange is attached to the plug; and  
wherein an inserted state of the socket and the plug is ensured by means of the fastening flange attached to the plug.

49. (Original) The coaxial line plug-in connection according to claim 45, wherein the first and second separating elements are each arranged ring-shaped.

50. (Original) The coaxial line plug-in connection according to claim 45, wherein the pin-shaped inner conductor is surrounded by a third separating element.

51. (Original) The coaxial line plug-in connection according to claim 49, wherein the first and second separating elements have a minimum wall thickness of 0.5 mm.

52. (Original) The coaxial line plug-in connection according to claim 45,  
wherein the first and second coupling zones have first and second axial directions;  
wherein the first and second coupling zones receive the at least one coupling element; and  
wherein the first and second coupling zones each have an optimum length of  $\lambda/4$  in the first and second axial directions.

53. (Currently Amended) A socket for coupling two coaxial lines each comprised of an inner conductor and an outer conductor surrounding the inner conductor, and which are suited for transmitting microwave signals of the wavelength  $\lambda$ , wherein a first coaxial line of the two coaxial lines can be plugged into the socket, the socket comprising:

at least one separating element which is arranged in the socket and which covers the end face of the socket;

wherein the socket is comprised of a dielectric material; and

wherein a galvanic separation of the outer and inner conductors is effected by the at least one separating element at a  $\lambda/4$ -coupling zone.

54. (Original) The socket according to claim 53, wherein the socket is directly attached

to a waveguide for centrically coupling the microwave signals into the waveguide.

55. (Currently Amended) A plug comprised of an outer conductor and an inner conductor protruding beyond the outer conductor in a pin-shape, for coupling two coaxial lines each comprised of an inner conductor and an outer conductor surrounding the inner conductor, and which are suited for transmitting microwave signals of a wavelength  $\lambda$ , the pin-shaped inner conductor being ~~surrounded~~ covered by a separating element of a dielectric material, whereby a galvanic separation of the inner conductors of the coaxial line is effected at a  $\lambda/4$ -coupling zone.

56. (Currently Amended) A galvanic separation using separating elements of dielectric materials in a socket or a plug for coupling ends of a coaxial line to be connected with each other on a  $\lambda/4$ -coupling zone, each comprised of an inner conductor and an outer conductor surrounding the inner conductor, and which are suited for transmitting microwave signals of the wavelength  $\lambda$ .